

WHAT IS CLAIMED IS:

1. A servicing system comprising:  
  
a suspension system connected to an overhead support structure and providing a path for at least one of an electric line, fluid line, or data line;  
  
a service module coupled to the suspension system and comprising at least one connector for allowing access to electricity, fluid, or data from said at least one electric line, fluid line, or data line; and  
  
an equipment support assembly removably coupled to the service module for supporting equipment.
  
2. A servicing system according to claim 1, wherein the suspension system provides a path for at least one electric line, at least one fluid line, and at least one data line, and the service module comprises at least one connector for each said at least one electric line, at least one fluid line, and at least one data line.
  
3. A servicing system according to claim 2, wherein the service module comprises a plurality of panels and at least one of the panels comprises a plurality of said connectors.
  
4. A servicing system according to claim 1, wherein the service module comprises at least one handle member.

5. A servicing system according to claim 4, wherein the service module comprises at least one control panel for at least partially controlling a movement of the suspension system.

6. A servicing system according to claim 1, wherein the equipment support assembly comprises a support column.

7. A servicing system according to claim 1, wherein the equipment support assembly further comprises at least one shelf member coupled to the support column.

8. A servicing system according to claim 7, wherein the at least one shelf member comprises an adjustable clamping assembly for assisting the at least one shelf member in supporting equipment.

9. A servicing system according to claim 8, wherein the adjustable clamping assembly comprises at least two spaced apart, movable clamp plates that approximately define a width of the at least one shelf member.

10. A servicing system according to claim 9, wherein the at least two vertically extending clamp plates are coupled together to move in unison.

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

11. A servicing system according to claim 7, wherein the at least one shelf member comprises a coupling assembly for attaching the at least one shelf member to the support column.

12. A servicing system according to claim 11, wherein the coupling assembly comprises at least two shelf arms.

13. A servicing system according to claim 11, wherein the coupling assembly comprises an adjustment mechanism for allowing adjustment of the position of the at least one shelf member along the support column.

14. A servicing system according to claim 7, wherein the at least one shelf member comprises an elastomeric bumper element.

15. A servicing system according to claim 7, wherein the at least one shelf member comprises a control panel for at least partially controlling movement of the suspension system.

16. A servicing system according to claim 7, wherein the at least one shelf member comprises at least one electric, fluid, or data connector for allowing access to electricity, fluid, or data from said at least one electric line, fluid line, or data line.

17. A servicing system according to claim 7, wherein the at least one shelf member comprises a rotatable and tiltable platform.

18. A servicing system according to claim 6, wherein the equipment support assembly further comprises an arm assembly coupled to the support column at one end and having a video display monitor coupled at another end.

19. A servicing system according to claim 1, further comprising a mobile platform for receiving the equipment support assembly upon decoupling of the equipment support assembly from the service module.

20. A servicing system according to claim 19, wherein the mobile platform comprises one of an engaging element and engaging element receiver and the equipment support assembly comprises the other of the engaging element and engaging element receiver, and decoupling of the equipment support assembly from the service module requires mating of the engaging element and the engaging element receiver.

21. A servicing system according to claim 20, wherein said engaging element comprises at least one vertical spine and said engaging element receiver comprises at least one cavity sized to securely fit said at least one vertical spine.

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

22. A servicing system according to claim 21, wherein said mobile platform comprises the at least one spine and the equipment support assembly comprise the at least one cavity.

23. A servicing system according to claim 1, wherein the mobile platform comprises a vertically adjustable base member for supporting the equipment support assembly after the equipment support assembly has been decoupled from the service module.

24. A servicing system according to claim 23, wherein the base member is an upper base member, and the upper base member is coupled to a lower base member by at least one cross link assembly, and the upper base member is adjusted vertically by one of a pneumatic, hydraulic, or electric actuator.

25. A method of decoupling an equipment support assembly from an overhead suspension system comprising:

positioning a mobile platform underneath the equipment support assembly;

raising a portion of the mobile platform vertically into engagement with the equipment support assembly; and

moving the mobile platform and equipment support assembly away from the overhead suspension system.

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

26. A method of decoupling an equipment support assembly according to claim 25, further comprising operating one of an pneumatic, hydraulic, or electric actuator to raise said portion of the mobile platform.

27. A method of decoupling an equipment support assembly according to claim 25, further comprising, prior to the raising of said portion of the mobile platform, detaching any electric, fluid, or data lines connected between the equipment support assembly and the suspension system.

28. A method of decoupling an equipment support assembly according to claim 25, further comprising locking the equipment support assembly to the mobile platform after said engagement with the equipment support assembly.

29. A shelf for a service system comprising:

- a shelf length dimension and a shelf width dimension;
- a shelf base member extending generally in a direction of the shelf length dimension;
- a clamping assembly coupled to the shelf base member and extending generally in a direction of the shelf width dimension; and
- a coupling assembly attached to the shelf base member for coupling the shelf to the service system.

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

30. A shelf according to claim 29, wherein the service system comprises an overhead suspension system.

31. A shelf according to claim 29, wherein the clamping assembly is adjustable for assisting the shelf in supporting equipment of varying sizes.

32. A shelf according to claim 29, wherein the clamping assembly comprises at least two spaced apart, movable clamp plates that approximately define the width dimension of the shelf.

33. A shelf according to claim 32, wherein the at least two vertically extending clamp plates are coupled together to move in unison.

34. A shelf according to claim 29, wherein the coupling assembly comprises an adjustment mechanism for allowing adjustment of the position of the shelf along the service system.

35. A shelf according to claim 29, further comprising an elastomeric bumper element.

36. A shelf according to claim 29, further comprising a control panel for at least partially controlling movement of the service system.

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

37. A shelf according to claim 29, further comprising at least one electric, fluid, or data connector for allowing access to electricity, fluid, or data from at least one electric line, fluid line, or data line of the service system.

38. A shelf according to claim 29, further comprising a pivotable platform coupled to the shelf base member.

39. A shelf assembly for a service system comprising:  
a support column having at least a front portion, a rear portion and a bottom portion;  
a coupling arrangement for assisting in attaching and detaching the shelf assembly to the service system; and  
at least one shelf member for supporting equipment.

40. A shelf assembly according to claim 39, wherein the service system comprises an overhead suspension system.

41. A shelf assembly according to claim 39, wherein the coupling arrangement is located at the rear portion of the support column.

42. A shelf assembly according to claim 41, wherein the coupling arrangement comprises pegs of the service system and mating recesses in the support column.



43. A shelf assembly according to claim 39, wherein the coupling arrangement is a first coupling arrangement and the shelf assembly further comprises a second coupling arrangement for assisting in attaching the shelf assembly to a mobile platform.

44. A shelf assembly according to claim 43, wherein second coupling arrangement is located at the bottom portion of the support column.

45. A shelf assembly according to claim 44, wherein the second coupling arrangement comprises one of an engaging element and engaging element receiver and the mobile platform comprises the other of the engaging element and the engaging element receiver, and coupling of the shelf assembly to the mobile platform requires mating of the engaging element and the engaging element receiver.

46. A shelf assembly according to claim 45, wherein said engaging element comprises at least one vertical spine and said engaging element receiver comprises at least one cavity sized to securely fit the at least one vertical spine.

47. A shelf assembly according to claim 46, wherein said mobile platform comprises the at least one spine and the support column comprises the at least one cavity.

48. A floor located mobile support device comprising:

a vertically adjustable base member for supporting an equipment support assembly of a service system; and

a coupling arrangement located on the base member for coupling the mobile support device to a bottom portion of the equipment support assembly.

49. A floor located mobile support device according to claim 48, wherein the service system comprises an overhead suspension system.

50. A floor located mobile support device according to claim 48, wherein the coupling arrangement comprises one of an engaging element and engaging element receiver and the equipment support assembly comprises the other of the engaging element and the engaging element receiver, and coupling of the equipment support assembly to the mobile support device requires mating of the engaging element and the engaging element receiver.

51. A floor located mobile support device according to claim 50, wherein said engaging element comprises at least one vertical spine and said engaging element receiver comprises at least one cavity sized to securely fit the at least one vertical spine.

52. A floor located mobile support device according to claim 51, wherein said mobile support device comprises the at least one spine and the equipment support assembly comprises the at least one cavity.

53. A floor mounted mobile support device according to claim 48, wherein the vertically adjustable base member is an upper base member and the mobile support device further comprise a lower base member connected to the upper base member.

54. A floor mounted mobile support device according to claim 53, wherein the upper base member is coupled to a lower base member by at least one cross link assembly, and the upper base member is adjusted vertically by one of a pneumatic, hydraulic, or electric actuator.

COPIES

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000